ATTACHMENT 9

DATE: October 5, 2005

CONSULTANT DELIVERABLES FOR PHASE II – DATABASE PREPARATION

PROJECT NO: _____ **P.I. NO. :** _____

FIELD SURVEYS BY: _____ **PHOTO SCALE : 1:3000**

PHOTGRAMMETRY BY: _____ **PHOTO DATE:** _____

DESIGN FIRM: _____

GDOT PROJECT LIAISON: _____

☒ A Project Survey Control Packet illustrating the primary horizontal and vertical control traverses established for the PROJECT. The traverse closure, state plane projection zone, grid factor, plus the horizontal and vertical datums shall be noted in this packet. Evidence (closure precision, adjustment data, field notes, data files, etc.) must be provided to document the accuracy of both the primary horizontal and vertical traverses. The CONSULTANT may use Global Positioning System (GPS) Technology as a means of establishing horizontal control pairs which are to be used for controlling the Primary Traverse within the PROJECT; however a **traditional Cadastral Traverse between these GPS pairs will still be required.**

☒ An electronic listing of all current property owners' names and addresses. This listing is to be known as the Property Statistics Report (PSR). The PSR will relate the 2-D geometric parcel chains in the CAiCE electronic database to the county tax records obtained from the property and deed research.

☐ Electronic and paper copy of the Hydraulic Engineering Field Report.

☐ Hard copy text printouts of all alignment chains used for profiles and cross sections, as well as a text printout of the actual end area resolution file. The text printout of the end area resolution file should show the station number, profile elevation, and the elevation and offset distance of each cross section reading. The Consultant shall use the Georgia Department of Transportation's CAiCE VBA Macro called **GDOT Compressed Endarea Report** to extract the information and print it into Departmental Standard format. The macro writes out a CAiCE Endarea file to an ASCII text file format that is similar to the RDS format for distribution to Auditors and Contractors when a project is let to Construction. This format uses much less paper when compared to the standard CAiCE Earthwork Report.

Note: A small font will need to be used to print the report without 'wrapping'.

The compressed format for the resulting output file is shown below. The example reflects data at one station.

STA. 2+50.000 EXISTING SURFACE

ELEV	DIST	ELEV	DIST	ELEV	DIST	ELEV	DIST
874.71	-43.61	876.53	-42.95	879.13	-38.58	878.92	-36.75
879.01	-31.58	878.45	-29.18	878.75	-27.86	879.33	-22.74
880.47	-13.61	880.53	-7.99	880.60	6.32	880.45	13.72
877.89	35.94	877.06	37.40	877.44	38.30	881.01	47.35
881.42	59.03	881.60	59.67	883.72	67.48	883.59	71.35
882.47	95.30	881.96	105.31				

☒ Hard copies of all survey data gathered on all existing bridges impacted by the PROJECT.

☒ Paper plots at 1"=50' of the resolved property, which is referenced in the **Section X - Survey Data (DGN) Files page 52 in the Georgia Department of Transportation's Survey Processing Guidelines** as the prop.dgn. The plot will show all resolved geometric parcel chains and the points which define the chains. Property corners found should be illustrated with a comment of P.C.F. and the type of material found.
Paper plots at a maximum scale of 1"=100' of all 3-D random terrain points and break lines which were used to develop the Digital Map Models (DMM) or Digital Terrain Models (DTM) used for obtaining cross sections and profiles.

☒ An electronic ASCII file. The ASCII file is an electronic file that can easily be generated from CAiCE. **Section 7 - Additional Files - page 65 in the Georgia Department of Transportation's Guidelines for Processing Design Data in CAiCE** illustrate the proper procedures for writing out data from CAiCE into the electronic format the Department is requesting.
If Global Positioning System (GPS) Technology was utilized, a printed or plotted schematic of the GPS network design. This schematic shall only show the non-trivial (independent) baselines used for the least squares adjustment of the GPS data.

☒ If Global Positioning System (GPS) Technology was utilized, a Receiver Independent Exchange (RINEX) format file of the raw data and control station data used in the GPS network. A copy of the NGS Data Sheet for each GPS Control point used should accompany the RINEX data for verification of control.

☒ Copies of the field survey checks performed as a measure of accuracy of the mapping.

☒ Electronic mapping (photogrammetric & field contact surveys) and related data that is formatted to be compatible with the DEPARTMENT'S design softwares. The finished maps and all related items or products shall become the property of the Department of Transportation and shall be delivered in accordance with the terms of this agreement.

☒ All information and material provided to the CONSULTANT by the DEPARTMENT shall also be returned at the completion of the agreement. The CONSULTANT shall also be prohibited from retaining, either for its own use or sale to others, copies of mapping produced or any related data produced or obtained as a result of this agreement. All mapping and terrain data shall be delivered to the DEPARTMENT on compact disks (CD).